APPENDIX B

The following SOAP-based XML code exemplifies some of the various APIs provided

by the invention in an exemplary embodiment.

The format of an exemplary call to reserve a namespace follows.

```
<SOAP-ENV:Envelope  xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/"
        SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
            <SOAP-ENV:Body>
                <m:NameSpaceReserveRequest
                    xmlns:m="http://www.authenticationsystem.com/NameSpace.xsd">
                    <ClientInfo>{Client Application Name}</ClientInfo>
                    <Version>2.0</Version>
                    <Authorization>
                            <Domain> EncryptedkeyX{A.com}</Domain>
                            <SiteID>{X}</SiteID>
                    </Authorization>
                    <AffiliateAdmin>Joe@A.com</AffiliateAdmin>
                    <NameSpaceAdmin>
                            <SignInName>Fred@B.com</SignInName >
                            <Password>101-Dalmations</Password>
                    </NameSpaceAdmin>
                </m:NameSpaceReserveRequest>
            </SOAP-ENV:Body>
        </SOAP-ENV:Envelope>
```

If the request to reserve a namespace succeeds, the format of a

NameSpaceReserveResponse XML response is as follows.

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
   SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
        <SOAP-ENV:Body>
      <m:NameSpaceReserveResponse
        xmlns:m="http://www.authenticationsystem.com/NameSpace.xsd">
           <Success>True</Success>
           <UID>123456789</UID>
      </m:NameSpaceReserveResponse>
   </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

If the request to reserve the namespace fails, the following SOAP error response may be
sent.

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
   <SOAP-ENV:Body>
      <SOAP-ENV: Fault>
         <faultcode>SOAP-ENV: Server</faultcode>
      <faultstring>{error text message}</faultstring>
      <detail>
       <mserror: errorInfo
         xmlns:mserror="http://schemas.com/soap-toolkit/faultdetail/error/">
         <mserror:returnCode{code}</mserror: returnCode>
               <mserror:serverErrorInfo>
         <mserror:description>{error text message }</mserror:description>
         </mserror:serverErrorInfo>
         <mserror:callStack>
          <mserror:callElement>
             <mserror:component>DelegatedAdmin</mserror:component>
```

```
                  <mserror:description>{error message text}</mserror:description>
                  <mserror:returnCode>{ code}</mserror:returnCode>
              </mserror:callElement>
          </mserror:callStack>
       </mserror:errorInfo>
     </detail>
   </SOAP-ENV: Fault>
  </SOAP-ENV:Body>
 </SOAP-ENV:Envelope>
```

The format of an exemplary SOAP call to release a namespace

(NameSpaceReleaseRequest) follows.

```
 <SOAP-ENV:Envelope  xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/"
        SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        <SOAP-ENV:Body>
            <m:NameSpaceReleaseRequest
               xmlns:m="http://www.authenticationsystem.com/NameSpace.xsd">
                <ClientInfo>{Client Application Name}</ClientInfo>
                <Version>2.0</Version>
                <Authorization>
                      <Domain> EncryptedkeyX{A.com}</Domain>
                      <SiteID>{X}</SiteID>
                      <AdminTicket>{ticket}</AdminTicket>
                </Authorization>
            </m:NameSpaceReleaseRequest>
        </SOAP-ENV:Body>
 </SOAP-ENV:Envelope>
```

If the namespace is successfully released, the affiliate will get a response such as the

following SOAP response.


```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
    SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        <SOAP-ENV:Body>
        <m: NameSpaceReleaseResponse
            xmlns:m="http://www.authenticationsystem.com/NameSpace.xsd">
                <Success>True</Success>
        </m: NameSpaceReleaseResponse>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```


If the request to release fails, the affiliate will get an error response

such as the following SOAP response.


```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
    <SOAP-ENV:Body>
        <SOAP-ENV: Fault>
            <faultcode>SOAP-ENV: Server</faultcode>
        <faultstring>{error text message}</faultstring>
        <detail>
        <mserror: errorInfo
            xmlns:mserror="http://schemas.com/soap-toolkit/faultdetail/error/">
            <mserror:returnCode{code}</mserror: returnCode>
                <mserror:serverErrorInfo>
            <mserror:description>{error text message }</mserror:description>
            </mserror:serverErrorInfo>
            <mserror:callStack>
                <mserror:callElement>
```

```
        <mserror:component>DelegatedAdmin</mserror:component>

        <mserror:description>{error message text}</mserror:description>

        <mserror:returnCode>{ code}</mserror:returnCode>

      </mserror:callElement>

    </mserror:callStack>

  </mserror:errorInfo>

 </detail>

</SOAP-ENV: Fault>

</SOAP-ENV:Body>

</SOAP-ENV:Envelope>
```

The format of an exemplary SOAP call to create a user account

(NameSpaceSignupRequest) follows.

```
<SOAP-ENV:Envelope  xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/"
        SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
        <SOAP-ENV:Body>
        <m: NameSpaceSignupRequest
           xmlns:m="http://www.authenticationsystem.com/NameSpace.xsd">
           <ClientInfo>{Client Application Name}</ClientInfo>
           <Version>2.0</Version>
           <Authorization>
               <Domain> EncryptedkeyX{A.com}</Domain>
               <SiteID>{X}</SiteID>
               <AdminTicket>{ ticket}</AdminTicket>
           </Authorization>
           <User>
               <SignInName>Fred@A.com</SignInName>
               <Password>101-Dalmations</Password>
```

```
            </User>
        </m: NameSpaceSignupRequest>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

If an account is successfully created, the following response may be sent.

```
<SOAP-ENV:Envelope xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/"
                    SOAP-
ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
        <SOAP-ENV:Body>
    <m: NameSpaceSignupResponse
        xmlns:m="http://www.authenticationsystem.com/NameSpace.xsd">
            <Success>True</Success>
            <UID>123456859</UID>
    </m: NameSpaceSignupResponse>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

If the account creation fails, the following SOAP response with the error may be sent to the caller.

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
    <SOAP-ENV:Body>
        <SOAP-ENV: Fault>
            <faultcode>SOAP-ENV: Server</faultcode>
        <faultstring>{error text message}</faultstring>
        <detail>
            <mserror: errorInfo
```

```
        xmlns:mserror="http://schemas.com/soap-toolkit/faultdetail/error/">
    <mserror:returnCode{code}</mserror: returnCode>
            <mserror:serverErrorInfo>
      <mserror:description>{error text message }</mserror:description>
    </mserror:serverErrorInfo>
    <mserror:callStack>
      <mserror:callElement>
        <mserror:component>DelegatedAdmin</mserror:component>
        <mserror:description>{error message text}</mserror:description>
        <mserror:returnCode>{ code}</mserror:returnCode>
      </mserror:callElement>
    </mserror:callStack>
   </mserror:errorInfo>
  </detail>
 </SOAP-ENV: Fault>
 </SOAP-ENV:Body>
 </SOAP-ENV:Envelope>
```

An exemplary SOAP-based request for removing user accounts from a namespace

follows.

```
    <SOAP-ENV:Envelope  xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/"
        SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
        <SOAP-ENV:Body>
            <m: NameSpaceRemoveMemberRequest
                xmlns:m="http://www.authenticationsystem.com/NameSpace.xsd">
                <ClientInfo>{Client Application Name}</ClientInfo>
                <Version>2.0</Version>
                <Authorization>
```

```
                    <Domain> EncryptedkeyX{A.com}</Domain>
                    <SiteID>{X}</SiteID>
                    <AdminTicket>{ticket}</AdminTicket>
              </Authorization>
              <Remove>
                    <SignInName>Joe@A.com</SignInName>
              </Remove>
         </m: NameSpaceRemoveMemberRequest>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

The following response may be sent to the caller if the user is removed.

```
<SOAP-ENV:Envelope xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/"
                    SOAP-
ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
              <SOAP-ENV:Body>
         <m: NameSpaceRemoveMemberResponse
              xmlns:m="http://www.authenticationsystem.com/NameSpace.xsd">
                    <Success>True</Success>
         </m: NameSpaceRemoveMemberResponse>
         </SOAP-ENV:Body>
    </SOAP-ENV:Envelope>
```

If an error occurs while processing a request to remove a user account from a namespace, an error response will be sent such as the following SOAP-based error response.

```
  <SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
    <SOAP-ENV:Body>
```

```
<SOAP-ENV: Fault>
    <faultcode>SOAP-ENV: Server</faultcode>
<faultstring>{error text message}</faultstring>
<detail>
  <mserror: errorInfo
    xmlns:mserror="http://schemas.com/soap-toolkit/faultdetail/error/">
    <mserror:returnCode{code}</mserror: returnCode>
          <mserror:serverErrorInfo>
    <mserror:description>{error text message }</mserror:description>
  </mserror:serverErrorInfo>
  <mserror:callStack>
    <mserror:callElement>
      <mserror:component>DelegatedAdmin</mserror:component>
      <mserror:description>{error message text}</mserror:description>
      <mserror:returnCode>{ code}</mserror:returnCode>
    </mserror:callElement>
  </mserror:callStack>
  </mserror:errorInfo>
</detail>
</SOAP-ENV: Fault>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

An example SOAP-based API call to enumerate all the administrators in a given namespace is the following.

```
<SOAP-ENV:Envelope xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/"
    SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
        <SOAP-ENV:Body>
```

```
<m: NameSpaceEnumerateAdminsRequest
    xmlns:m="http://www.authenticationsystem.com/NameSpace.xsd">
        <ClientInfo>{Client Application Name}</ClientInfo>
        <Version>2.0</Version>
        <Authorization>
                <Domain> EncryptedkeyX{A.com}</Domain>
                <SiteID>{X}</SiteID>
                <AdminTicket>{ ticket}</AdminTicket>
        </Authorization>
        <Type>Namespace</Type>
    </m: NameSpaceEnumerateAdminsRequest>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

An exemplary SOAP-based response for enumerating a list of administrators for a namespace follows.

```
<SOAP-ENV:Envelope  xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/"
        SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
        <SOAP-ENV:Body>
            <m: NameSpaceEnumerateAdminsResponse
            xmlns:m="http://www.authenticationsystem.com/NameSpace.xsd">
                <Success>True</Success>
                <Admins>
                        <Name>Joe@A.com</Name>
                        <Name>Fred@A.com</Name>
                        <Name>Sally@A.com</Name>
                </Admins>
            </m: NameSpaceEnumerateAdminsResponse>
```

```
        </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

An exemplary API call for requesting the authentication server to add or delete

administrators for the namespace is shown below.

```
        <SOAP-ENV:Envelope  xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/"
                SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
                <SOAP-ENV:Body>
                <m: NameSpaceEditAdminListRequest
                        xmlns:m="http://www.authenticationsystem.com/NameSpace.xsd">
                        <ClientInfo>{Client Application Name}</ClientInfo>
                        <Version>2.0</Version>
                        <Authorization>
                                <Domain> EncryptedkeyX{A.com}</Domain>
                                <SiteID>{X}</SiteID>
                                <AdminTicket>{Encrypted ticket}</AdminTicket>
                        </Authorization>
                        <Action>Add</Action>
                        <Admin>Joe@A.com</Admin>
                </m: NameSpaceEditAdminListRequest>
                </SOAP-ENV:Body>
        </SOAP-ENV:Envelope>
```

If the request to process the administrator cannot be processed due to an error, a SOAP-

based error response such as shown below will be sent.

```
        <SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
        <SOAP-ENV:Body>
```

```
<SOAP-ENV: Fault>
    <faultcode>SOAP-ENV: Server</faultcode>
<faultstring>{error text message}</faultstring>
<detail>
  <mserror: errorInfo
    xmlns:mserror="http://schemas.com/soap-toolkit/faultdetail/error/">
    <mserror:returnCode {code}</mserror: returnCode>
            <mserror:serverErrorInfo>
      <mserror:description>{error text message }</mserror:description>
    </mserror:serverErrorInfo>
    <mserror:callStack>
      <mserror:callElement>
        <mserror:component>DelegatedAdmin</mserror:component>
        <mserror:description>{error message text}</mserror:description>
        <mserror:returnCode>{ code}</mserror:returnCode>
      </mserror:callElement>
    </mserror:callStack>
  </mserror:errorInfo>
</detail>
</SOAP-ENV: Fault>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

The following SOAP request may be used to obtain a list of administrators that have administrative rights to the namespace.

```
<SOAP-ENV:Envelope  xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
    SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
        <SOAP-ENV:Body>
        <m: NameSpaceEnumerateAdminsRequest
```

```
                    xmlns:m="http://www.authenticationsystem.com/NameSpace.xsd">
                    <ClientInfo>{Client Application Name}</ClientInfo>
                    <Version>2.0</Version>
                    <Authorization>
                        <Domain> EncryptedkeyX{A.com}</Domain>
                        <SiteID>{X}<SiteID>
                        <AdminTicket>{ ticket}</AdminTicket>
                            </Authorization>
                            <Type>Namespace</Type>
                </m: NameSpaceEnumerateAdminsRequest>
            </SOAP-ENV:Body>
        </SOAP-ENV:Envelope>
```

If the request to enumerate administrators is valid, the authentication server responds

with a list of administrators for the namespace in a response such as with the following SOAP

response.

```
    <SOAP-ENV:Envelope  xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
            SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
                <SOAP-ENV:Body>
            <m: NameSpaceEnumerateAdminsResponse
                xmlns:m="http://www.authenticationsystem.com/NameSpace.xsd">
                    <Success>True</Success>
            <Admins>
                        <Name>Joe@A.com</Name>
                        <Name>Fred@A.com</Name>
                        <Name>Sally@A.com</Name>
            </Admins>
            </m: NameSpaceEnumerateAdminsResponse>
        </SOAP-ENV:Body>
```

```
</SOAP-ENV:Envelope>
```

If there a problem with processing the request to enumerate administrators in a

namespace, the following SOAP response is an exemplary error response sent to the requestor.

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
    <SOAP-ENV:Body>
        <SOAP-ENV: Fault>
            <faultcode>SOAP-ENV: Server</faultcode>
        <faultstring>{error text message}</faultstring>
        <detail>
          <mserror: errorInfo
            xmlns:mserror="http://schemas.com/soap-toolkit/faultdetail/error/">
            <mserror:returnCode{code}</mserror: returnCode>
                    <mserror:serverErrorInfo>
              <mserror:description>{error text message }</mserror:description>
            </mserror:serverErrorInfo>
            <mserror:callStack>
              <mserror:callElement>
                <mserror:component>DelegatedAdmin</mserror:component>
                <mserror:description>{error message text}</mserror:description>
                <mserror:returnCode>{ code}</mserror:returnCode>
              </mserror:callElement>
            </mserror:callStack>
          </mserror:errorInfo>
        </detail>
        </SOAP-ENV: Fault>
    </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

The SOAP request to reset a password may look like the following.

```
<SOAP-ENV:Envelope  xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
          SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
     <SOAP-ENV:Body>
   <m: NameSpaceResetPasswordRequest
      xmlns:m="http://www.authenticationsystem.com/NameSpace.xsd">
      <ClientInfo>{Client Application Name}</ClientInfo>
      <Version>2.0</Version>
      <Authorization>
                  <Domain> EncryptedkeyX{A.com}</Domain>
         <SiteID>{X}<SiteID>
         <AdminTicket>{ticket}</AdminTicket>
            </Authorization>
         <User>Fred@A.com</User>
                  <Password>OldSmokes</Password>
      </m: NameSpaceResetPasswordRequest>
    </SOAP-ENV:Body>
   </SOAP-ENV:Envelope>
```

The following SOAP response is an exemplary SOAP response to inform the requestor

that the attempt to reset a password succeeded.

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
     SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"/>
          <SOAP-ENV:Body>
      <m: NameSpaceResetPasswordResponse
      xmlns:m="http://www.authenticationsystem.com/NameSpace.xsd">
            <Success>True</Success>
      </m: NameSpaceResetPasswordResponse>
```

```
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

The following SOAP response is an exemplary SOAP response to inform the requestor

that the attempt to reset a password failed.

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
   <SOAP-ENV:Body>
      <SOAP-ENV: Fault>
         <faultcode>SOAP-ENV: Server</faultcode>
      <faultstring>{error text message}</faultstring>
      <detail>
        <mserror: errorInfo
          xmlns:mserror="http://schemas.com/soap-toolkit/faultdetail/error/">
          <mserror:returnCode{code}</mserror: returnCode>
               <mserror:serverErrorInfo>
          <mserror:description>{error text message }</mserror:description>
        </mserror:serverErrorInfo>
        <mserror:callStack>
          <mserror:callElement>
            <mserror:component>DelegatedAdmin</mserror:component>
            <mserror:description>{error message text}</mserror:description>
            <mserror:returnCode>{ code}</mserror:returnCode>
          </mserror:callElement>
        </mserror:callStack>
      </mserror:errorInfo>
    </detail>
   </SOAP-ENV: Fault>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

An exemplary SOAP interface to update a profile follows.

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
    SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
        <SOAP-ENV:Body>
    <m: NameSpaceUpdateRequest
        xmlns:m="http://www.authenticationsystem.com/NameSpace.xsd">
        <ClientInfo>{Client Application Name}</ClientInfo>
        <Version>2.0</Version>
        <Authorization>
                <Domain> EncryptedkeyX{A.com}</Domain>
            <SiteID>{X}<SiteID>
            <AdminTicket>{Encrypted ticket}</AdminTicket>
            </Authorization>
    <User>
            <SignInName>Fred@A.com</SignInName>
        <NickName>Joe</NickName>
        <Email></Email>
        <Gender></Gender>
        <Country></Country>
        <Region></Region>
        <PostalCode></PostalCode>
        <Birthdate></Birthdate>
        <SecretQuestion>Who is the coolest cat on Earth?</SecretQuestion>
        <SecretAnswer>Toon</SecretAnswer>
        <AllowEmailinProfile>true</AllowEmailinProfile>
<AllowAuthenticationSystemNetworkEmail>true</AllowAuthenticationSystemNetworkEmail>
        <LanguagePreference>1033</LanguagePreference>
        <Accessibility>true</Accessibility>
        <FirstName>Sachin</FirstName>
```

```
                  <LastName>Kukreja</LastName>

                  <TimeZone>America/Los_Angeles</TimeZone >

                  <Occupation>A</Occupation>

                  <Flags>1100110100</Flags></User>

                           </User>

          </m: NameSpaceUpdateRequest>

      </SOAP-ENV:Body>

      </SOAP-ENV:Envelope>
```

If the request to update a user's profile succeeds, an XML response such as the following

SOAP response is sent to the caller.


```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"

               SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">

          <SOAP-ENV:Body>

          <m: NameSpaceUpdateResponse

             xmlns:m="http://www.authenticationsystem.com/NameSpace.xsd">

                  <Success>True</Success>

          </m: NameSpaceSignupResponse>

      </SOAP-ENV:Body>

      </SOAP-ENV:Envelope>
```